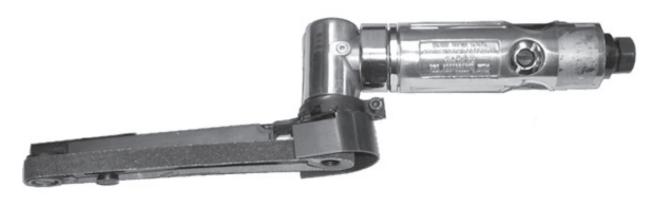


# 3/8" X 13" AIR BELT SANDER WITH ACCESSORIES

**Model 97055** 

### SET UP AND OPERATING INSTRUCTIONS



Diagrams within this manual may not be drawn proportionally.

Due to continuing improvements, actual product may differ slightly from the product described herein.

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3491 Mission Oaks Blvd., Camarillo, CA 93011

Visit our website at: http://www.harborfreight.com



Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

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For technical questions or replacement parts, please call 1-800-444-3353.

#### **SAVE THIS MANUAL**

Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

#### IMPORTANT SAFETY INFORMATION

In this manual, on the labeling, and all other information provided with this product:



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

**ADANGER** 

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

**AWARNING** 

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

**ACAUTION** 

CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

**NOTICE** is used to address practices not related to personal injury.

CAUTION

CAUTION, without the safety alert symbol, is used to address practices not related to personal injury.

#### **GENERAL SAFETY RULES**



#### WARNING! Read all instructions

Failure to follow all instructions listed below may result in serious injury. The term "air tool" in all of the warnings listed below refers to your Air Belt Sander.

#### SAVE THESE INSTRUCTIONS

#### 1. Work area safety

- a. Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b. Do not operate the Sander in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Air tools create sparks which may ignite the dust or fumes.
- c. Keep children and bystanders away while operating an air tool. Distractions can cause you to lose control.

#### 2. **Personal safety**

- a. Stay alert, watch what you are doing and use common sense when operating the Sander. Do not use an air tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating air tools may result in serious personal injury.
- b. Use safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c. Remove any adjusting key or wrench before turning the Sander on. A wrench or a key left attached to a rotating part of the air tool may result in personal injury.
- d. Do not overreach. Keep proper footing and balance at all times. *This enables better control of the Sander in unexpected situations.*
- e. Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.

#### 3. Air tool use and care

- a. Do not force the Sander. Use the correct air tool for your application. The correct air tool will do the job better and safer at the rate for which it was designed.
- b. Do not use the Sander if the Control Lever (6) does not turn it on and off.

  Any air tool that cannot be controlled with the Control Lever is dangerous
  and must be repaired. When connecting the tool to the air supply, keep your
  hands off the Control Lever to avoid accidentally starting the tool.

- c. Disconnect the Sander from its compressed air supply source before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the air tool accidentally.
- d. Store idle air tools out of the reach of children, and do not allow people unfamiliar with the Sander or these instructions to operate the air tool. Air tools are dangerous in the hands of untrained users.
- e. Maintain air tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the Sander's operation. If damaged, have the air tool repaired before use. *Many accidents are caused by poorly maintained air tools*.
- f. Use the Sander in accordance with these instructions and in the manner intended for this particular type of air tool, taking into account the working conditions and the work to be performed. Use of the Sander for operations different from those intended could result in a hazardous situation.

#### 4. Service

a. Have your Sander serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the air tool is maintained.

#### **VIBRATION HAZARD**

This tool vibrates during use. Repeated or long-term exposure to vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders. To reduce the risk of vibration-related injury:

- 1. Anyone using vibrating tools regularly or for an extended period should first be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this tool. If you feel any medical or physical symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.
- 2. Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.
- 3. Wear suitable gloves to reduce the vibration effects on the user.
- 4. Use tools with the lowest vibration when there is a choice between different processes.
- 5. Include vibration-free periods each day of work.

- 6. Grip tool as lightly as possible (while still keeping safe control of it). Let the tool do the work.
- 7. To reduce vibration, maintain the tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.

#### **SPECIFIC SAFETY RULES**

- Maintain labels and nameplates on the Sander. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- 2. Stay within the maximum air pressure capacity **(90 PSI)**. Never operate the Sander above 90 PSI.
- 3. Compressed air only. Use clean, dry, regulated, compressed air at 90 PSI. Never use oxygen, carbon dioxide, combustible gases, or any other bottled gas as a power source for this tool.
- Remove adjusting wrenches. Check that adjusting wrenches are removed from the Sander and work surface before connecting to a compressed air supply source.
- 5. Avoid unintentional starting. Prepare to begin work before turning on the tool.
- 6. **CAUTION!** To avoid injury, keep hands and fingers away from the Sanding Belt. If both hands are holding the Body (1) of the Sander, your hands and fingers cannot be injured by the Belt.
- 7. When using a handheld air tool, use both hands on the tool to resist starting torque.
- 8. Do not leave the tool unattended when it is connected to its compressed air supply. Turn off the tool, and disconnect it from its air supply before leaving.
- 9. Disconnect air hose and release any built-up air pressure. Never service the Sander with the air hose attached. Always release any built-up air pressure in the tool (even after disconnecting the air hose).
- 10. Use clamps (not included) or other practical ways to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.
- 11. Do not hold the Sander in any area for more than a few seconds. Damage to the surface may occur.
- 12. This product is not a toy. Keep it out of reach of children.

- 13. **WARNING!** The brass components of this product contain lead, a chemical known to the State of California to cause birth defects (or other reporductive harm). *(California Health & Safety Code 25249.5, et seq.)*
- 14. Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contains chemicals known (to the State of California) to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

Lead from lead-based paints

Crystalline silica from bricks and cement or other masonry products Arsenic and chromium from chemically treated lumber

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. (California Health & Safety Code § 25249.5, et seq.)

15. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.



#### **SPECIFICATIONS**

Maximum Operating Pressure	90 PSI			
Air Consumption	7 CFM (Cubic Feet Per Minute)			
Air Inlet Size	1/4"-18 NPT			
Speed (Max.)	18,000 RPM			
Activation Method	Paddle Switch with Spring-Loaded Safety Lock			
Abrasive Belt Size	13" Long x 3/8" Wide			
Belt Tensioning	Spring-Loaded Rack with Tensioning Screw			
Sound Level	93 dBA			
Accessories	Sanding Belts: 80, 120 Grit (1 Each, Included) 3mm Hex Wrench (Qty. 1)			

#### UNPACKING

When unpacking, check to make sure the item is intact and undamaged. If any parts are missing or damaged, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

#### **SET UP INSTRUCTIONS**



Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

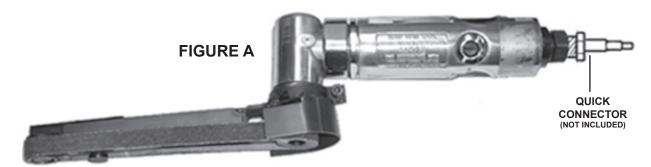
# **AWARNING**

Risk of accidental starting; resulting in serious personal injury. Disconnect the Sander from its compressed air source before assembling or making any adjustments to the tool.

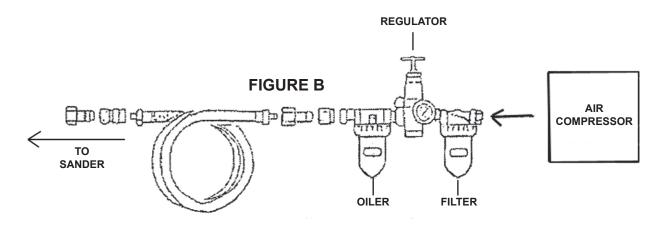
**Note:** For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

## **Assembly**

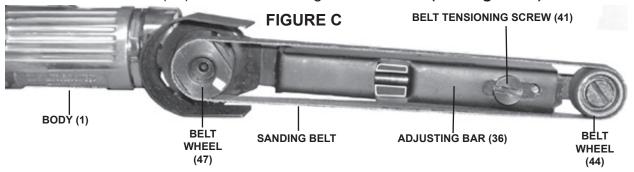
1. Prior to using the Sander, the Sander must have a male Quick Connector (not included) connected to the tool's Air Inlet (50). To do so, wrap about 3" of Pipe Thread Seal Tape (not included) around the threads of the Quick Connector. Then firmly screw in the Quick Connector. (See Figure A.)



2. For best tool performance, you should incorporate an in-line water filter, regulator and oiler as shown in the illustration below. If an oiler is NOT used, it is recommended that you squirt 3 to 4 drops of pneumatic tool oil (not included) into the previously installed Quick Connector of the tool before each use. (See Figure B.)



3. To install a Sanding Belt, loosen the Belt Tensioning Screw (41) located on the Adjusting Bar (36). Place the belt over the Belt Wheel (44). Push the Belt Wheel (44) against the work bench to collapse the Adjusting Bar (36), allowing the belt to attach over the Driving Belt Wheel (47) at the motor end. Manually rotate the belt to make sure that it is centrally located on the two belt wheels. Make sure the Belt Wheel (44) center screw is tight at all times. (See Figure C.)



- 4. Loosen the Clamp Screw (52) with the supplied Hex Wrench (51). Rotate the Adjusting Bar (36) to the desired position and tighten the Clamp Screw (52).
- 5. Connect a compressed air supply hose (not included) to the previously installed Quick Connector. Then turn on the air compressor, and set its regulator to **90 PSI**. **Do not exceed 90 PSI**. **(See Figure D.)**



#### **OPERATING INSTRUCTIONS**



Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.



CAUTION! Prior to using the Sander, make sure to wear ANSIapproved safety impact goggles, dust mask or respirator, and heavy duty work gloves.

2. Use clamps (not included) or other practical ways to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.

- 3. Grip the Sander and make sure the Sanding Belt is not touching any surface before you turn on the tool. Then pull on the spring-loaded safety lock and gently squeeze the Paddle Switch (6) and allow the Sanding Belt to rotate to its fullest speed. (See Figure C.)
- 4. Place the rotating Sanding Belt on the workpiece surface, being careful not to strike the workpiece with the sides of the Adjusting Bar (36). Move the Sander back and forth to remove material. To increase the rotating speed of the Sanding Belt, squeeze the Paddle Switch (6) harder. To decrease the speed of rotation, relax pressure on the Paddle Switch. (See Figure C.)
- 5. Keep a light pressure on the Sander when in use. Do not apply heavy pressure, as damage to the work surface may result.
- 6. When finished using the Sander, release pressure on the Paddle Switch (6). Turn off the air compressor. Squeeze the Paddle Switch again to release any remaining compressed air in the Sander. Then disconnect the air hose from the tool. (See Figure D.)
- 7. Make sure to store the Sander in a clean, dry, safe location out of reach of children and other unauthorized people.

#### MAINTENANCE AND SERVICING

Risk of serious personal injury from accidental starting. Disconnect Sander from its compressed air supply before performing inspection, maintenance, or cleaning procedures.

**AWARNING** Damaged equipment can fail, causing serious personal injury. Do not use damaged equipment. If abnormal noise or vibration occurs, correct problem before further use.

- 1. **BEFORE EACH USE**, inspect the general condition of the Sander. Check for loose parts, misalignment or binding of moving parts, cracked or broken parts, damaged hose, and any other condition that may affect its safe operation.
- 2. TO CLEAN THE EXTERIOR OF THE SANDER, wipe with a clean, damp cloth using a mild detergent. Do not use solvents. Do not immerse the tool in liquid.
- 3. WHEN STORING, keep the Sander in a clean, dry, safe location out of reach of children and other unauthorized people.
- 4. **CAUTION:** All maintenance, service, and repairs not mentioned in this manual must only be performed by a qualified service technician.
- PERIODICALLY APPLY GREASE 5. to the small grease fitting located at the junction of the Sander handle and head. See Figure E, right.



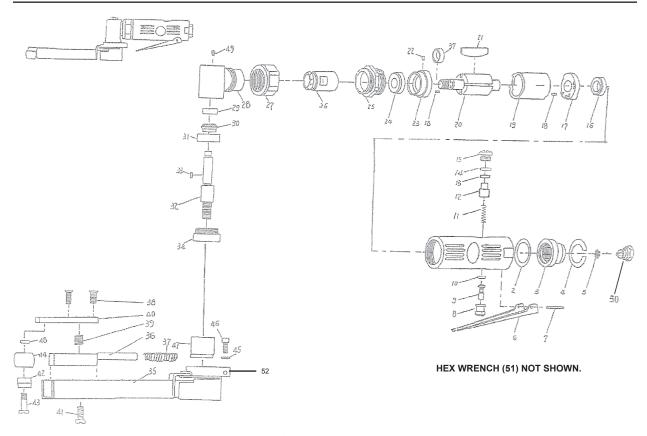
# TROUBLESHOOTING

Problem	Possible Solution				
Sander does not start.	Squeeze harder on Paddle Switch.				
	2. Make sure air compressor is set at 90 PSI.				
	Check for air leaks in air hose and all other compressed air connections.				
	4. Remove Quick Connector. Check Air Filter in Air Inlet for excessive debris build-up. If necessary, clean or replace Air Filter.				
Sander will not remove material from workpiece, even after repeated attempts.	Make sure Sanding Paper is not dull. If necessary, replace     Sanding Paper.				
	Use a more course grit Sanding Paper.				
	3. Do not continue using Sander to avoid damaging workpiece. Use another method to remove material.				
Sanding Belt slips off tool when in use.	Loosen the Belt Adjusting Screw. Stretch the Sanding Paper tighter on the Adjusting Bar. Then retighten Adjusting Screw.				

# PARTS LIST

Part	Description	Qty.	Part	Description	Qty.
1	Body (with Bushing)	1	27	Nut	1
2	O-Ring	1	28	Angle Head	1
3	End Cap	1	29	Ball Bearing	1
4	C-Ring	1	30	Bevel Gear	1
5	Air Filter	1	31	Ball Bearing	1
6	Paddle Switch	1	32	Chuck Casing	1
7	Spring Pin	1	33	Key	1
8	Brush	1	34	Сар	1
9	Valve	1	35	Belt Track	1
10	O-Ring	1	36	Adjusting Bar	1
11	Spring	1	37	Spring	1
12	Speed Regulator	1	38	Nut	2
13	O-Ring	1	39	Spring	1
14	O-Ring	1	40	Сар	1
15	Valve Screw	1	41	Belt Tensioning Screw	1
16	Ball Bearing	1	42	Ball Bearing	2
17	Rear Plate	1	43	Spindle	1
18	Spring Pin	2	44	Belt Wheel	1
19	Cylinder	1	45	Spring Washer	1
20	Rotor	1	46	Nut	1
21	Vane	4	47	Belt Wheel	1
22	Steel Ball	1	48	Washer	2
23	Front Plate	1	49	Oil Hole	1
24	Ball Bearing	1	50	Air Inlet	1
25	Connector	1	51	Hex Wrench	1
26	Bevel Gear	1	52	Clamp Screw	1

#### **ASSEMBLY DIAGRAM**



#### PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

#### 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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#### Record Product's Serial Number Here:\_\_\_\_\_

**Note:** If product has no serial number, record month and year of purchase instead.

**Note:** Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.